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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Stéphane SABELLE et al.

Application No.: 10/807,162 — Group Art Unit: 1751

Filed: March 24, 2004 — Examiner: Unassigned

For: PARA-PHENYLENEDIAMINE DERIVATIVES COMPRISING A CYCLIC DIAZA GROUP SUBSTITUTED WITH A CATIONIC RADICAL, AND USE OF THESE DERIVATIVES FOR DYEING KERATIN FIBERS

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

REQUEST FOR CORRECTED PATENT APPLICATION PUBLICATION UNDER 37 C.F.R. § 1.221(b)

The U.S. Patent and Trademark Office published the above-identified Application No. 10/807,162 as Publication No. US 2005/0066451-A1, on March 31, 2005. The published application contains a mistake that is the fault of the Office and may be material. Attached hereto is a copy of the relevant page of the originally filed application and a marked-up copy of the corresponding page of the published application containing the mistake.

A mistake is material when it affects the public's ability to appreciate the technical

disclosure of the patent application publication or determine the scope of the provisional rights that an applicant may seek to enforce upon issuance of a patent. *See* C.F.R. § 1.221(b). The mistake, which is indicated in red ink on the relevant page of the marked-up copy of the published application attached hereto, is as follows:

On page 20, claim 19, "C_1-C_{1-4}" should read --C_1-C_{14}.

As the identified mistake affects the scope of the claims or the public's ability to determine the same, Applicants request that the Office correct the above-identified material mistake in the published application, which is the fault of the Office. Further, Applicants request that the Office forward a copy of the corrected published application or at least a notification of the occurrence or predicted occurrence of the corrected publication once it has been corrected.

Applicants believe that no Petition or fee is due in connection with this Request. However, if any Petition or fee is due, please grant the Petition and charge the fee to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

Dated: May 31, 2005

By: Mareesa A. Frederick
Mareesa A. Frederick
Reg. No. 55,190

Enclosures:
- Marked-up copy of page of the published application; and
- Corresponding page of the originally filed application.

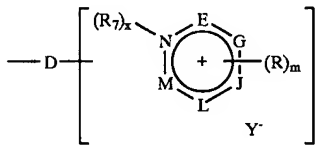
17. The compound according to claim 16, wherein R is chosen from hydrogen;

an alkyl radical; alkyl radicals substituted with at least one hydroxyl; alkyl radicals substituted with at least one amino; a carboxyl radical; a carbamoyl radical; an amino radical; and a hydroxyl radical.

18. The compound according to claim 17, wherein R is chosen from hydrogen; a hydroxyl radical; a methyl radical; an amino radical; a hydroxymethyl radical; and an aminomethyl radical.

19. The compound according to claim 1, wherein R_2 is an onium radical Z of formula (IV)

(IV)



wherein:

D is a linker arm chosen from a covalent bond and from linear and branched (C_1-C_{14}) alkylene chains, which may comprise at least one hetero atom chosen from oxygen, sulphur and nitrogen atoms, and which may optionally be substituted with at least one radical chosen from hydroxyl and amino radicals, and further may optionally comprise at least one carbonyl radical;

the ring members E, G, J, L and M, which may be identical or different, are chosen from carbon, oxygen, sulphur and nitrogen atoms and form a ring chosen from pyridine, pyrimidine, pyrazine, triazine and pyridazine rings;

m is an integer ranging from 1 to 5;

R, which may be identical or different, is chosen from a hydrogen atom, halogen atoms, hydroxyl radicals, C_1-C_6 alkyl radicals, C_1-C_6 monohydroxyalkyl radicals, C_2-C_6 polyhydroxyalkyl radicals, C_1-C_6 alkoxy radicals, tri(C_1-C_6)alkylsilane(C_1-C_6)alkyl radicals, carbamoyl radicals, carboxyl radicals, C_1-C_6 alkylcarbonyl radicals, amino radicals, amino radicals substituted with a radical chosen from (C_1-C_6)alkyl, (C_1-C_6)alkylcarbonyl, carbamoyl and (C_1-C_6)alkylsulphonyl radicals; C_1-C_6 monohydroxy-alkyl radicals; C_2-C_6 polyhydroxyalkyl radicals; and quaternary ammonium radicals;

R_7 is chosen from C_1-C_6 alkyl radicals; C_1-C_6 monohydroxyalkyl radicals; C_2-C_6 polyhydroxyalkyl radicals; aryl radicals; benzyl radicals; C_1-C_6 aminoalkyl radicals; C_1-C_6 aminoalkyl radicals wherein the amine is mono- or disubstituted with at least one radical chosen from (C_1-C_6)alkyl, (C_1-C_6)alkylcarbonyl, carbamoyl and (C_1-C_6)alkylsulphonyl radicals; C_1-C_6 carboxyalkyl radicals; C_1-C_6 carbamoylalkyl radicals; C_1-C_6 trifluoroalkyl radicals; tri(C_1-C_6)alkylsilane(C_1-C_6)alkyl radicals; C_1-C_6 sulphonamidoalkyl radicals; (C_1-C_6)alkylcarboxy(C_1-C_6)alkyl radicals; (C_1-C_6)alkylsulphinyl(C_1-C_6)alkyl radicals; (C_1-C_6)alkylsulphonyl(C_1-C_6)alkyl radicals; (C_1-C_6)alkylcarboxy(C_1-C_6)alkyl radicals; N-(C_1-C_6)alkylcarbamoyl(C_1-C_6)alkyl radicals; N-(C_1-C_6)alkylsulphonamido(C_1-C_6)alkyl radicals; and quaternary ammonium radicals;

x is equal to 0 or 1, with the proviso that

when x=0, the linker arm D is attached to the nitrogen atom,

when x=1, the linker arm D is attached to one of the ring members chosen from E, G, J, L and M; and

Y^- is a counterion.

20. The compound according to claim 19, wherein the ring members E, G, J, L and M form, with the nitrogen of the ring, a ring chosen from pyridine and pyrimidine rings.

21. The compound according to claim 19, wherein

x is equal to 0, and

R is chosen from a hydrogen atom, hydroxyl radicals, C_1-C_6 alkyl radicals, C_1-C_6 monohydroxyalkyl radicals, C_2-C_6 polyhydroxyalkyl radicals, C_1-C_6 alkoxy radicals, tri(C_1-C_6)alkylsilane(C_1-C_6)alkyl radicals, carbamoyl radicals, C_1-C_6 alkylcarbonyl radicals, amino radicals, amino radicals mono- and disubstituted with at least one radical chosen from (C_1-C_6)alkyl, (C_1-C_6)alkylcarbonyl, carbamoyl and (C_1-C_6)alkylsulphonyl radicals; C_1-C_6 monohydroxyalkyl radicals and C_2-C_6 polyhydroxyalkyl radicals.

22. The compound according to claim 19, wherein

x is equal to 1;

R_7 is chosen from C_1-C_6 alkyl radicals; C_1-C_6 monohydroxyalkyl radicals; C_2-C_6 polyhydroxyalkyl radicals; C_1-C_6 aminoalkyl radicals, C_1-C_6 aminoalkyl radicals wherein the amine is mono- or disubstituted with at least one radical chosen from (C_1-C_6)alkyl radicals, (C_1-C_6)alkylcarbonyl radicals, carbamoyl radicals, and (C_1-C_6)alkylsulphonyl radicals; C_1-C_6 carbamoylalkyl radicals; tri(C_1-C_6)alkylsilane(C_1-C_6)alkyl radicals; (C_1-C_6)alkylcarbonyl(C_1-C_6)alkyl radicals; N-(C_1-C_6)alkylcarbamyl(C_1-C_6)alkyl radicals; and

R is chosen from a hydrogen atom, hydroxyl radicals, C_1-C_6 alkyl radicals; C_1-C_6 monohydroxyalkyl radicals; C_2-C_6 polyhydroxyalkyl radicals; C_1-C_6 alkoxy radicals, tri(C_1-C_6)alkylsilane(C_1-C_6)alkyl radicals; carbamoyl radicals; C_1-C_6 alkylcarbonyl radicals; amino radicals; amino radicals mono- or disubstituted with at least one radical chosen from (C_1-C_6)alkyl, (C_1-C_6)alkylcarbonyl, carbamoyl and (C_1-C_6)alkylsulphonyl radicals.

23. The compound according to claim 22, wherein R is chosen from a hydrogen atom and alkyl radicals that may optionally be substituted, and R_7 is an alkyl radical that may optionally be substituted.

24. The compound according to claim 23, wherein R is chosen from hydrogen; an alkyl radical; alkyl radicals substituted with at least one hydroxyl; alkyl radicals substituted with at least one amino; a carboxyl radical; a carbamoyl radical; an amino radical; and a hydroxyl radical.

25. The compound according to claim 24, wherein R is chosen from hydrogen and from at least one radical chosen from hydroxyl, methyl, amino, hydroxymethyl and aminomethyl radicals.

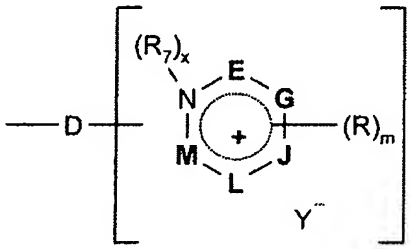
26. The compound according to claim 1, wherein either b is equal to zero, or R_4 is chosen from an alkyl radical; alkyl radicals substituted with at least one hydroxyl; alkyl radicals substituted with at least one amino; a carboxyl radical; and a carbamoyl radical.

27. The compound according to claim 1, wherein R_3 is chosen from hydrogen; a hydroxyl radical; an amino radical; an alkyl radical; alkyl radicals substituted with at least one hydroxyl; alkyl radicals substituted with at least one amino; a carboxyl radical; and a carbamoyl radical.

17. The compound according to Claim 16, wherein R is chosen from hydrogen; an alkyl radical; alkyl radicals substituted with at least one hydroxyl; alkyl radicals substituted with at least one amino; a carboxyl radical; a carbamoyl radical; an amino radical; and a hydroxyl radical.

18. The compound according to Claim 17, wherein R is chosen from hydrogen; a hydroxyl radical; a methyl radical; an amino radical; a hydroxymethyl radical; and an aminomethyl radical.

19. The compound according to Claim 1, wherein R_2 is an onium radical Z of formula (IV)



(IV)

wherein:

- D is a linker arm chosen from a covalent bond and from linear and branched C_1-C_{14} alkylene chains, which may comprise at least one hetero atom chosen from oxygen, sulphur and nitrogen atoms, and which may optionally be substituted with at least one radical chosen from hydroxyl and amino radicals, and further may optionally comprise at least one carbonyl radical;
- the ring members E, G, J, L and M, which may be identical or different, are chosen from carbon, oxygen, sulphur and nitrogen atoms and form a ring chosen from pyridine, pyrimidine, pyrazine, triazine and pyridazine rings;